RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/900,063A_
Source: _1600_
Date Processed by STIC: _6/12/2003_

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PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
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Revised 04/24/2003

RECEIVED

JUN 1 9 2003

TECH CENTER 1800/

1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/900,063A

DATE: 06/12/2003
TIME: 08:07:21

Input Set : A:\EP.txt
Output Set: N:\CRF4\06122003\I900063A.raw

```
  5 <110> APPLICANT: Rothschild, Max F.
  7          Vincent, Amy L.
  9          Tuggle, Christopher K.
 13 <120> TITLE OF INVENTION: PROLACTIN RECEPTOR GENE AS A GENETIC MARKER FOR INCREASED
LITTER SIZE IN
 14          ANIMALS
 18 <130> FILE REFERENCE: P02285UD5
 22 <140> CURRENT APPLICATION NUMBER: US 09/900,063A
 24 <141> CURRENT FILING DATE: 2001-07-06
 28 <150> PRIOR APPLICATION NUMBER: US 08/812,208
 30 <151> PRIOR FILING DATE: 1997-03-06
 34 <150> PRIOR APPLICATION NUMBER: US 08/742,805
 36 <151> PRIOR FILING DATE: 1996-11-01
 40 <150> PRIOR APPLICATION NUMBER: US 60/022,180
 42 <151> PRIOR FILING DATE: 1996-07-19
 46 <160> NUMBER OF SEQ ID NOS: 18
 50 <170> SOFTWARE: PatentIn version 3.1
 54 <210> SEQ ID NO: 1
 56 <211> LENGTH: 20
 58 <212> TYPE: DNA
 60 <213> ORGANISM: Porcine
 64 <400> SEQUENCE: 1
 65 cccaaaacag caggagaacg                                        20
 68 <210> SEQ ID NO: 2
 70 <211> LENGTH: 20
 72 <212> TYPE: DNA
 74 <213> ORGANISM: Porcine
 78 <400> SEQUENCE: 2
 79 ggcaagtggt tgaaaatgga                                        20
 82 <210> SEQ ID NO: 3
 84 <211> LENGTH: 492
 86 <212> TYPE: DNA
 88 <213> ORGANISM: Porcine
 92 <220> FEATURE:
 94 <221> NAME/KEY: allele
 96 <222> LOCATION: (240)..(240)
 98 <223> OTHER INFORMATION: G/A polymorphic site
102 <400> SEQUENCE: 3
103 aagtcaacaa agatggagca ctggcgttgc tcccaaaaca gcaggagaac ggcgaccggc   60
105 cggagaaggc tggcgcccct gaaaccagca aggaatacgc ccaggtgtcc cgggtgatgg  120
107 ataaccacat cctggtgtta gtgcaggatc cgcgagctcg aaacgtggct ccgtttgaag  180
109 aaccaaccaa ggagaccccg ccatcccggc cgcagaatcc agctgcgaaa gacctggcc g  240
111 gcttcaccac ggccccgggc cactgcagac acccgctggg tgggctggat tacctcgatc  300
113 ccgcaggctt tatgcactcc tttcagtgag agcttggttc atgggatgat gggttacaag  360
```

Does Not Comply
Corrected Diskette Needed

per Sequence Rules, use "r"

r = a or g

RAW SEQUENCE LISTING   DATE: 06/12/2003
PATENT APPLICATION: US/09/900,063A   TIME: 08:07:21

Input Set : A:\EP.txt
Output Set: N:\CRF4\06122003\I900063A.raw

```
115 gtggggtttt tttcaggtcg cactacgtga aatgcactct accagagaaa gctcgaaaat        420
117 ggggttagaa tgacactacc cagactcaca gttcactcct cttcatgctc cattttcaac        480
119 cacttgcctc tt                                                            492
122 <210> SEQ ID NO: 4
124 <211> LENGTH: 20
126 <212> TYPE: DNA
128 <213> ORGANISM: Unknown
132 <220> FEATURE:
134 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor
135        were used to design the degenerate primer
137 <220> FEATURE:
139 <221> NAME/KEY: misc_difference
141 <222> LOCATION: (13)..(13)
143 <223> OTHER INFORMATION: (C/T)    use "y" y = c or t
147 <400> SEQUENCE: 4
148 tcacaaggtc aacaaagatg                                                    20
151 <210> SEQ ID NO: 5
153 <211> LENGTH: 20
155 <212> TYPE: DNA
157 <213> ORGANISM: Unknown
161 <220> FEATURE:
163 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor
164        were used to design the degenerate primer
166 <220> FEATURE:
168 <221> NAME/KEY: misc_difference
170 <222> LOCATION: (3)..(3)
172 <223> OTHER INFORMATION: (G/A)   use "r"
176 <220> FEATURE:
178 <221> NAME/KEY: misc_difference
180 <222> LOCATION: (9)..(9)
182 <223> OTHER INFORMATION: (G/A)   use "r"
186 <220> FEATURE:
188 <221> NAME/KEY: misc_difference
190 <222> LOCATION: (16)..(16)
192 <223> OTHER INFORMATION: (G/A)   use "r"
196 <400> SEQUENCE: 5
197 tggagaaaga ggcaagtggt                                                    20
200 <210> SEQ ID NO: 6
202 <211> LENGTH: 20
204 <212> TYPE: DNA
206 <213> ORGANISM: Porcine
210 <400> SEQUENCE: 6
211 cggccgcaga atcctgctgc                                                    20
214 <210> SEQ ID NO: 7
216 <211> LENGTH: 24
218 <212> TYPE: DNA
220 <213> ORGANISM: Porcine
224 <400> SEQUENCE: 7
225 accccacctt gtaacccatc atcc                                               24
```

RAW SEQUENCE LISTING   DATE: 06/12/2003
PATENT APPLICATION: US/09/900,063A   TIME: 08:07:21

       Input Set : A:\EP.txt
       Output Set: N:\CRF4\06122003\I900063A.raw

```
228 <210> SEQ ID NO: 8
230 <211> LENGTH: 18
232 <212> TYPE: DNA
234 <213> ORGANISM: Porcine
238 <400> SEQUENCE: 8
239 caaggtggga acatgagt                                              18
242 <210> SEQ ID NO: 9
244 <211> LENGTH: 20
246 <212> TYPE: DNA
248 <213> ORGANISM: Porcine
252 <400> SEQUENCE: 9
253 aatcctttta tttttggccc                                            20
256 <210> SEQ ID NO: 10
258 <211> LENGTH: 20
260 <212> TYPE: DNA
262 <213> ORGANISM: Porcine
266 <400> SEQUENCE: 10
267 gattattgtc tgggcagtgg                                            20
270 <210> SEQ ID NO: 11
272 <211> LENGTH: 20
274 <212> TYPE: DNA
276 <213> ORGANISM: Porcine
280 <400> SEQUENCE: 11
281 aatcctttta tttttggccc                                            20
284 <210> SEQ ID NO: 12
286 <211> LENGTH: 20
288 <212> TYPE: DNA
290 <213> ORGANISM: Porcine
294 <400> SEQUENCE: 12
295 gattattgtc tgggcagtgg                                            20
298 <210> SEQ ID NO: 13
300 <211> LENGTH: 23
302 <212> TYPE: DNA
304 <213> ORGANISM: Porcine
308 <400> SEQUENCE: 13
309 ctatttcaca aaaactgcgc tac                                        23
312 <210> SEQ ID NO: 14
314 <211> LENGTH: 566
316 <212> TYPE: DNA
318 <213> ORGANISM: Porcine
322 <220> FEATURE:
324 <221> NAME/KEY: misc_feature
326 <222> LOCATION: (36)..(36)
328 <223> OTHER INFORMATION: n = unknown at amino acid position 36
332 <400> SEQUENCE: 14
333 gattattgtc tgggcagtgg tcttctctgt ctatcnaccc ccctcccatt catggctctc   60
335 aggqtataat ggccaaaaaa aagacaagac aaaaatgatg gaaacctaca gataattyaa  120
337 gcacctcatt ttgccattag ctgcattagc cataaaaaaa aaaaaaaaaa cctttctctca 180
339 gtgctagaaa aaaacagaat agactcattt gaaactgatc ttctctctac caaagggagt  240
```

? This is a nucleotide sequence.

W-->

RAW SEQUENCE LISTING   DATE: 06/12/2003
PATENT APPLICATION: US/09/900,063A   TIME: 08:07:21

Input Set : A:\EP.txt
Output Set: N:\CRF4\06122003\I900063A.raw

```
341 agcgcagttg tgaaatagta aacgtctgac aagaacagca aataatccca ctagtaattt      300
343 cagaatccgc ctcctcaatt agccagaatt cactgtgatg ctggcctcta taattattat      360
345 ttgtcttcac cactgattag tttcacatca tgaaaattgc atgtcattta gtttcacrta      420
347 gcctcagaac caaccctaat tcctacctgc catatccctg tagcagctat tcgaagatca      480
349 caaggtggga acatgtgtya tttatctttt ctcttacatt attttagagc atggtggcct      540
351 gcatccgggc caaaaataaa aggatt                                           566
354 <210> SEQ ID NO: 15
356 <211> LENGTH: 518
358 <212> TYPE: DNA
360 <213> ORGANISM: Porcine
364 <220> FEATURE:
366 <221> NAME/KEY: misc_feature
368 <222> LOCATION: (49)..(49)
370 <223> OTHER INFORMATION: n = unknown in amino acid position 49
374 <220> FEATURE:
376 <221> NAME/KEY: misc_feature
378 <222> LOCATION: (67)..(67)
380 <223> OTHER INFORMATION: n = unknown in amino acid position 67
384 <400> SEQUENCE: 15
385 gtacacacac acacacacac acacacacac acacaccacc gttaagctnt ctttctgaat       60
387 catgccnacc cgagggccac ccatagagga gtgtggtgga gggtgccttg gcacttctga      120
389 gccctgcatc cctacaccca ctagcctcaa gatgtcatcc ctgccctggc ccccacccat      180
391 ctgcttctgt caccagcaga atggtccagt cattgagcgg accttcatat tgactccagt      240
393 ggcttctggc tttttctagg acagtcacct ccgggaaaac ctgagatctt caaatgtcgt      300
395 tctcccgaaa aggaaacatt cgcctgctgg tggaagccgg gggcggatgg aggacttcct      360
397 accaactaga cgctgactta ccacaaggaa gggtaagcat tcgcgtgtct cccaacaaac      420
399 cacacgagtg ttctctctct gtgggccaga ggaacactgc ttctgggtta gaactgcctc      480
401 gctttggagt tccgtcatg gctcagtggt aacgaatc                               518
404 <210> SEQ ID NO: 16
406 <211> LENGTH: 133
408 <212> TYPE: DNA
410 <213> ORGANISM: Homo sapiens
414 <400> SEQUENCE: 16
415 gacagttacc tcctggaaaa cctgagatct ttaaatgtcg ttctcccaat aaggaaacat       60
417 tcacctgctg gtggaggcct gggacagatg gaggacttcc taccaattat tcactgactt      120
419 accacaggga agg                                                         133
422 <210> SEQ ID NO: 17
424 <211> LENGTH: 53
426 <212> TYPE: PRT
428 <213> ORGANISM: Homo sapiens
432 <400> SEQUENCE: 17
434 Gly Gln Leu Pro Pro Gly Lys Pro Glu Ile Phe Lys Ser Pro Phe Cys
435 1               5                   10                  15
438 Arg Ser Pro Asn Lys Glu Thr Phe Thr Glu Ala Arg Pro Gly Thr Asp
439             20                  25                  30
442 Gly Gly Leu Pro Thr Asn Lys Pro Ala Asn Tyr Ser Leu Thr Tyr His
443         35                  40                  45
446 Arg Glu Gly Thr Lys
447         50
```

This is a nucleotide sequence

W-->

RAW SEQUENCE LISTING   DATE: 06/12/2003
PATENT APPLICATION: US/09/900,063A   TIME: 08:07:21

Input Set : **A:\EP.txt**
Output Set: **N:\CRF4\06122003\I900063A.raw**

```
450 <210> SEQ ID NO: 18
452 <211> LENGTH: 132
454 <212> TYPE: DNA
456 <213> ORGANISM: Porcine
460 <400> SEQUENCE: 18
461 acagtcacct ccgggaaaac ctgagatctt caaatgtcgt tctcccgaaa aggaaacatt      60
463 cgcctgctgg tggaagccgg gggcggatgg aggacttcct accaactaga cgctgactta     120
465 ccacaaggaa gg                                                          132
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 06/12/2003
PATENT APPLICATION: US/09/900,063A   TIME: 08:07:22

Input Set : A:\EP.txt
Output Set: N:\CRF4\06122003\I900063A.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 36
Seq#:15; N Pos. 49,67

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 13

VERIFICATION SUMMARY   DATE: 06/12/2003
PATENT APPLICATION: **US/09/900,063A**   TIME: 08:07:22

Input Set : **A:\EP.txt**
Output Set: **N:\CRF4\06122003\I900063A.raw**

L:333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
M:341 Repeated in SeqNo=15

```
              STATISTICS SUMMARY                  DATE: 06/12/2003
              PATENT APPLICATION:  US/09/900,063A      TIME: 08:07:22

                     Input Set : A:\EP.txt
                     Output Set: N:\CRF4\06122003\I900063A.raw

Application Serial Number: US/09/900,063A
Alpha or Numeric or Xml: Numeric
Application Class:
Application File Date: 07-06-2001
Art Unit: 1600
Software Application: PatentIN3.1
Total Number of Sequences: 18
Total Nucleotides: 2086
Total Amino Acids: 53
Number of Errors: 0
Number of Warnings: 3
Number of Corrections: 0

MESSAGE SUMMARY

341 W: 3 ((46) "n" or "Xaa" used)
```